ISP IP-Pool User Manual

Version	15
Issue date	11.05.2011
Replaces version	14
Valid from	13.06.2011 (WSG-8.4/jun11)
Valid until	recalled or replaced by new version
Classification	Technical Support Documentation (BBCS)
Status	in work by HP

Checklist of changes

Version	Date	Changed by	Comments / nature of the change
01	25.11.2005	Robert van Haarlem (HP)	Initial Creation
02	29.11.2005	Robert van Haarlem (HP)	Adjusted to new template
03	11.01.2006	Robert van Haarlem (HP)	Corrections acc. SPT-v3.0.4
04	19.01.2006	Robert van Haarlem (HP)	Corrections to Subscriber Fix IP-Select (section 3.3.2)
05	19.05.2006	Robert van Haarlem (HP)	CR127: new admin-page for SPT configuration parameters
06	19.07.2006	Robert van Haarlem (HP)	CR138: Notifikation Empty IP-Pool / Utilization Reports
07	15.08.2006	Robert van Haarlem (HP)	Release V1.0.5: Added diff. "createPool","createScope" / new screenshots
08	30.10.2006	Robert van Haarlem (HP)	Release V1.0.8: Corrected overall font to that used in all WSG-GUIs
09	05.02.2007	Robert van Haarlem (HP)	Release V1.1.0: CR 183 'Lawful Interception' / Admin ISPs removed (obsolete: moved to WSG-Admin ISPs)
10	02.05.2007	Robert van Haarlem (HP)	Release V1.1.2: CR220 'IP-Pool Mgmt Fixes' / New Admin page for 'IP-Pool-Logs'
11	03.04.2008	Robert van Haarlem (HP)	Release V2.0-0
12	07.10.2008	HP	Release V2.1-0, updated screenshot in section 3.3.1
13	09.11.2009	HP	Release V2.2-1, Updates Nov09-Release
14	14.05.2010	HP	Release V2.3-1, Update May10-Release
15	11.05.2011	HP	Release 3.2.0

Release

Version	Date	Released by	Comments / nature of the change
12	21.11.2008	Cornel Kälin, SCS	Released for contract version 13-2
14	17.05.2010	Cornel Kälin, SCS	Released for contract version 13-4
15	22.05.2011	H.Künzi	Released for contract version 3.2.0

swisscom

Contents

1 Introduction 4
1.1 Purpose 4
1.2 Scope 4
1.3 Target readership, requirements of the reader 4

2 General User Interface Functionalities 5
2.1 Validation and Navigation 5
2.2 List of Values (LOV) 5
2.3 List Display (paging/sorting) 5
2.4 Error handling 6
2.5 Success messages 6
2.6 Service Navigation 6
2.7 Page flow 8
2.8 Buttons 9
2.9 Login 9
2.10 Principals 9

3 Application Pages 10
3.1 Home Page 10
3.2 IP Pool Management 11
3.2.1 List IP Address Pools 11
3.2.2 IP Pool Details 12
3.2.3 IP Pool Utilization 13
3.2.4 Create IP Address Pool 13
3.2.5 Subscriber Fix IP – Select 15
3.2.6 Subscriber Fix IP- Details 16
3.2.7 List available Pools 17
3.2.8 Available Pool Details 18
3.2.9 Set/Unset Fix IP 19
3.2.10 Set Pool-Type 20
3.2.11 DHCP Session – Select 21
3.3 Administration 22
3.3.1 Manage BRAS Servers 22
3.3.2 Manage SPT Parameters 23
3.3.3 Manage Logs 24
3.3.4 Documents / Download 26

1 Introduction

This manual describes the Graphical User Interface (GUI) of the IP Pool Application.

For user-friendly reasons, the manual is written as short as possible. This means every function is illustrated with a screenshot example and a small text.

1.1 Purpose

The purpose of the manual is to provide a helpful guide for the user of the IP Pool Application.

1.2 Scope

The manual describes the whole user interface and covers all available functionalities.

1.3 Target readership, requirements of the reader

The reader must have a good understanding of the management functionalities around IP-Pools and eventually be informed about the scope of the implemented functionalities.

2 General User Interface Functionalities

The application is WEB based and supports the following Web-Browsers:

- Microsoft Internet Explore Version 5.5 and higher
- Mozilla Firefox 1.0.7 and higher

The application is build in 4 main parts:

- IP Pool Management
- Subscriber Fixed IP Address Management
- DHCP Session Management
- RADIUS Session Management

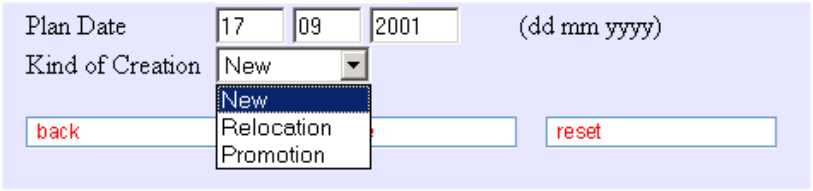
The application supports four languages (English, French, Italian, German), but is delivered in English only.

2.1 Validation and Navigation

The following validation rules and navigation types are implemented in the application.

2.2 List of Values (LOV)

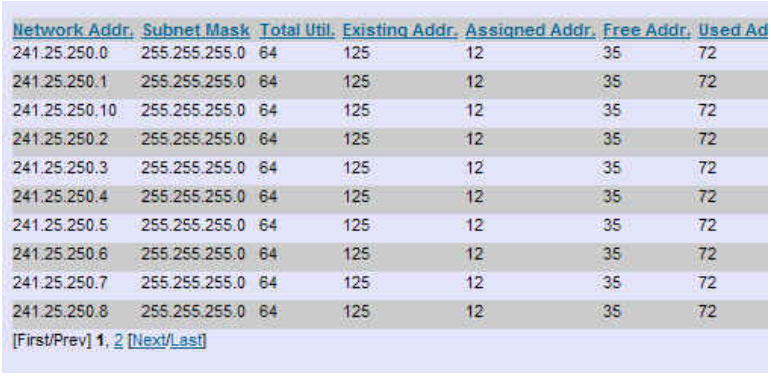
Some fields of the input screens are validated against a list-of-values. The user can press the little arrow beside the fields and select one of the values. See example:



Some other fields are multiple choices and the user can select several values with the Ctrl-Button.
See example:

2.3 List Display (paging/sorting)

Paging and sorting is implemented on most of the lists:



Network Addr.	Subnet Mask	Total Util.	Existing Addr.	Assigned Addr.	Free Addr.	Used Ad
241.25.250.0	255.255.255.0	64	125	12	35	72
241.25.250.1	255.255.255.0	64	125	12	35	72
241.25.250.10	255.255.255.0	64	125	12	35	72
241.25.250.2	255.255.255.0	64	125	12	35	72
241.25.250.3	255.255.255.0	64	125	12	35	72
241.25.250.4	255.255.255.0	64	125	12	35	72
241.25.250.5	255.255.255.0	64	125	12	35	72
241.25.250.6	255.255.255.0	64	125	12	35	72
241.25.250.7	255.255.255.0	64	125	12	35	72
241.25.250.8	255.255.255.0	64	125	12	35	72

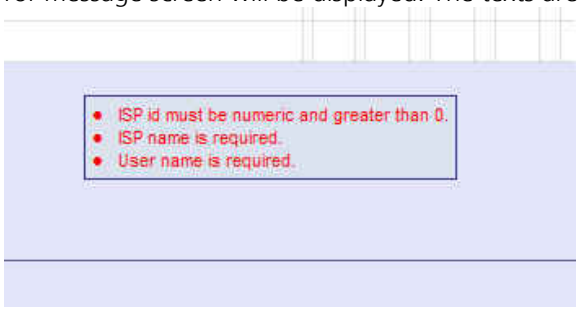
[First/Prev] 1, 2 [Next/Last]

Sorting is achieved using the links on the column headers.

Paging is achieved using the corresponding links on the table footer.

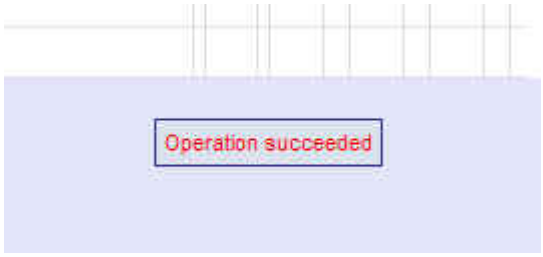
2.4 Error handling

After submitting the input screen, the application validates the users input. If a business rule, format etc is violated error message screen will be displayed. The texts are self-explaining and the user has to correct it.



2.5 Success messages

After submitting the input screen in an admin task, the application processes the users input. If everything is correct, an 'Operation succeeded' message will be displayed.



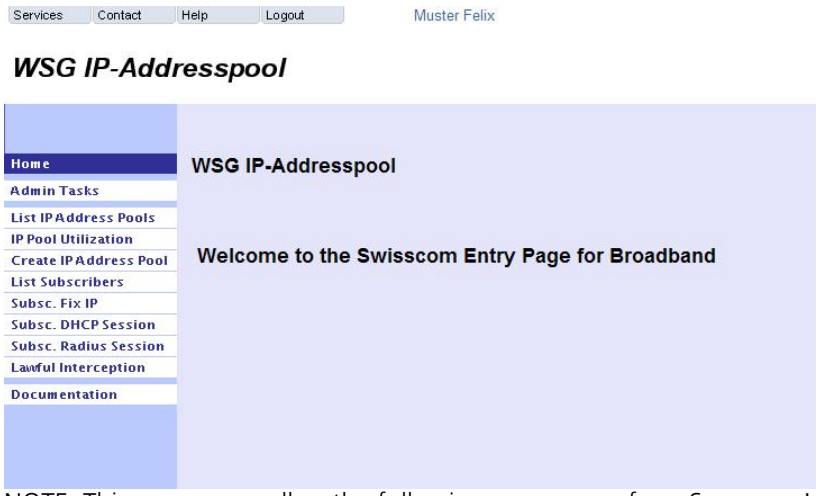
2.6 Service Navigation

For each action, whether the user is a Super User, read-only or CUC, the currently valid services are displayed in the Service Navigation menu at the left site of the screen.

The Powergate header offers the following functionality (Top Frame):

- Services : Back to the selection of services in Powergate
- Contacts : Contact information for questions concerning the WSG IP Addresspool service
- Help : FAQ (frequently asked question) for the WSG IP Addresspool service
- Logout : Logout from Powergate

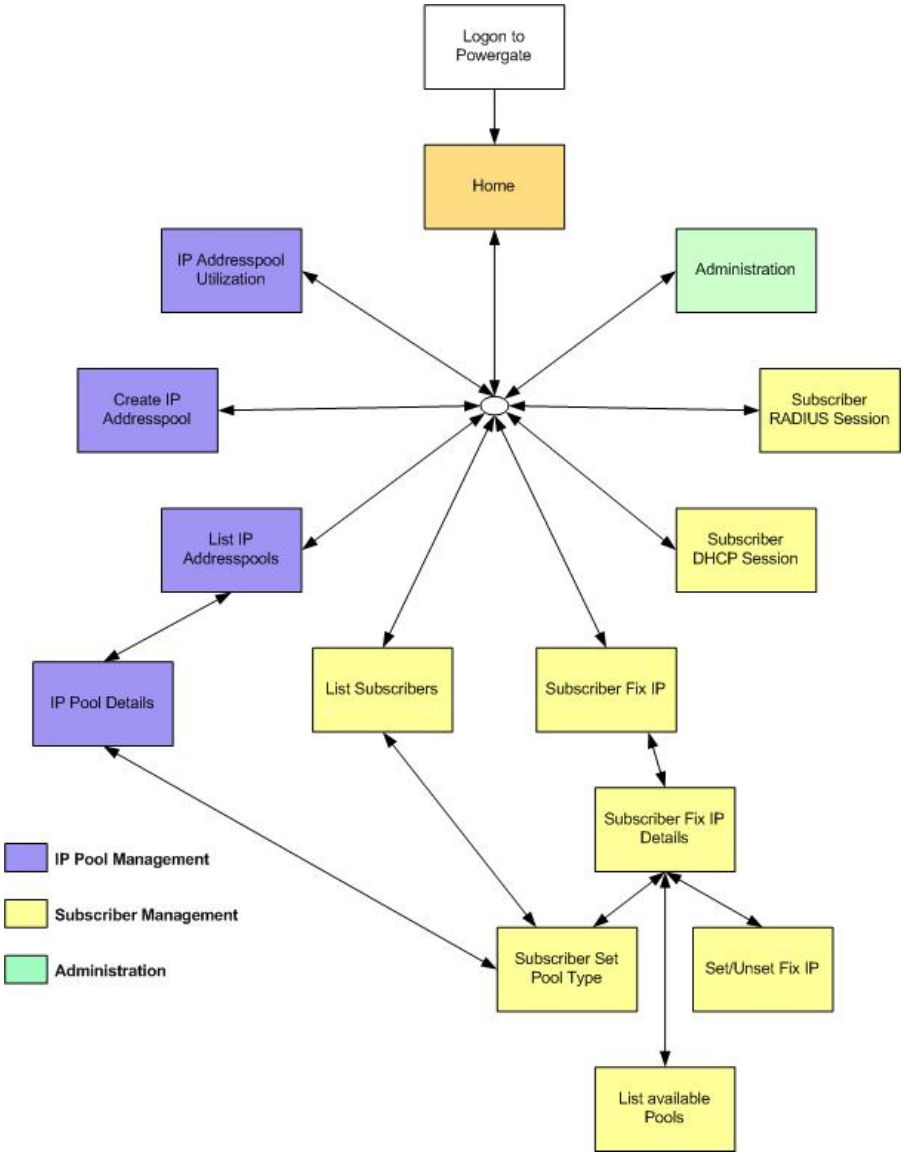
Here a snapshot of this application header:



NOTE: This screen as well as the following ones are as for a Superuser! If certain functionality is not displayed, then it is not available to the current logged-in user.

2.7 Page flow

The page flow for the main function areas is shown in the following figure. It will always be possible to navigate directly from one main function to another via the menu on the LHS of the screen. Within each function the user may go back to the previous screen using the 'Back' button.



2.8 Buttons

For each user screen the available action buttons are displayed at the bottom of the screen.

The following buttons are used in the application:

back	Go back to the previous screen
reset	Reset all of the fields to their original values
create	Go forward to the appropriate create screen
submit	Submit input data for processing
cancel	Invoke the functionality to cancel an order
refresh	Refresh a Detail screen to display the latest status
download	Download the selected document
continue	Continue to the next screen in the sequence

2.9 Login

The whole login part is described in the Users Manual of Powergate.

2.10 Principals

After login via Powergate you can see the following menus on the left side.
As a basic rule, an ISP can only have access to address pools and installed services belonging to him. This restriction is automatically secured by the login procedure over Powergate (using the ISP Code as key).

- **Home** > The home page of the WSG-IP Addresspool application
- **Administration** > The administration page
- **List IP Address Pools** > The start page for the IP Pool management
- **IP Pool Utilization** > The page providing the utilization statistics of an IP Pool
- **Create IP Address Pool** > The page allowing the creation of a new IP Pool
- **List Subscribers** > The page providing the query for a subscribers list
- **Subscriber Fix IP** > The start page for the Subscriber management
- **Subscriber DHCP Session** > The start page for the DHCP session management
- **Subscriber RADIUS Session** > The start page for the RADIUS session management

3 Application Pages

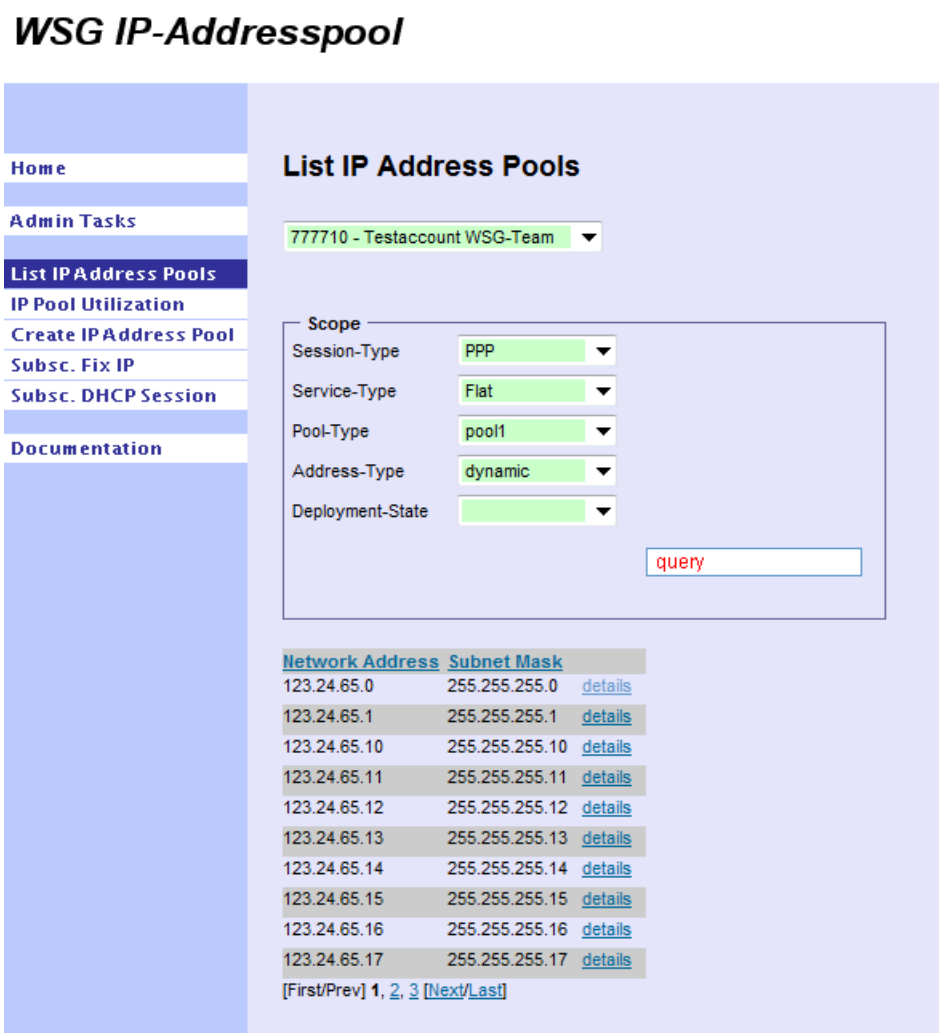
3.1 Home Page

After the login via PowerGate the IP Pool home page will be displayed.

3.2 IP Pool Management

3.2.1 List IP Address Pools

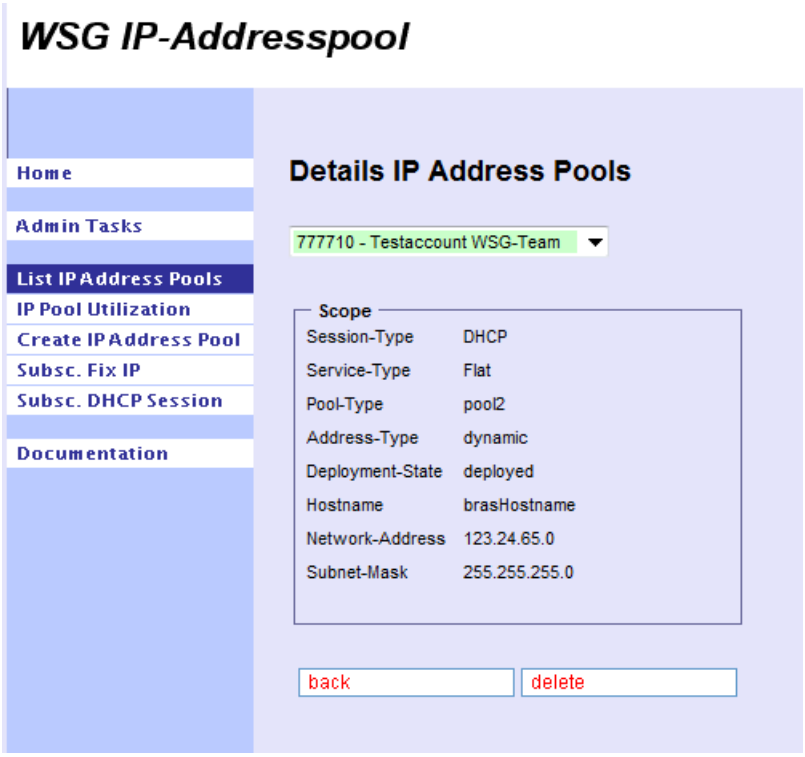
For a given ISP and for provided scope constraints, the available IP Add ressPools can be queried and listed.



For a listed IP Pool, the pool's details page can be requested.

3.2.2 IP Pool Details

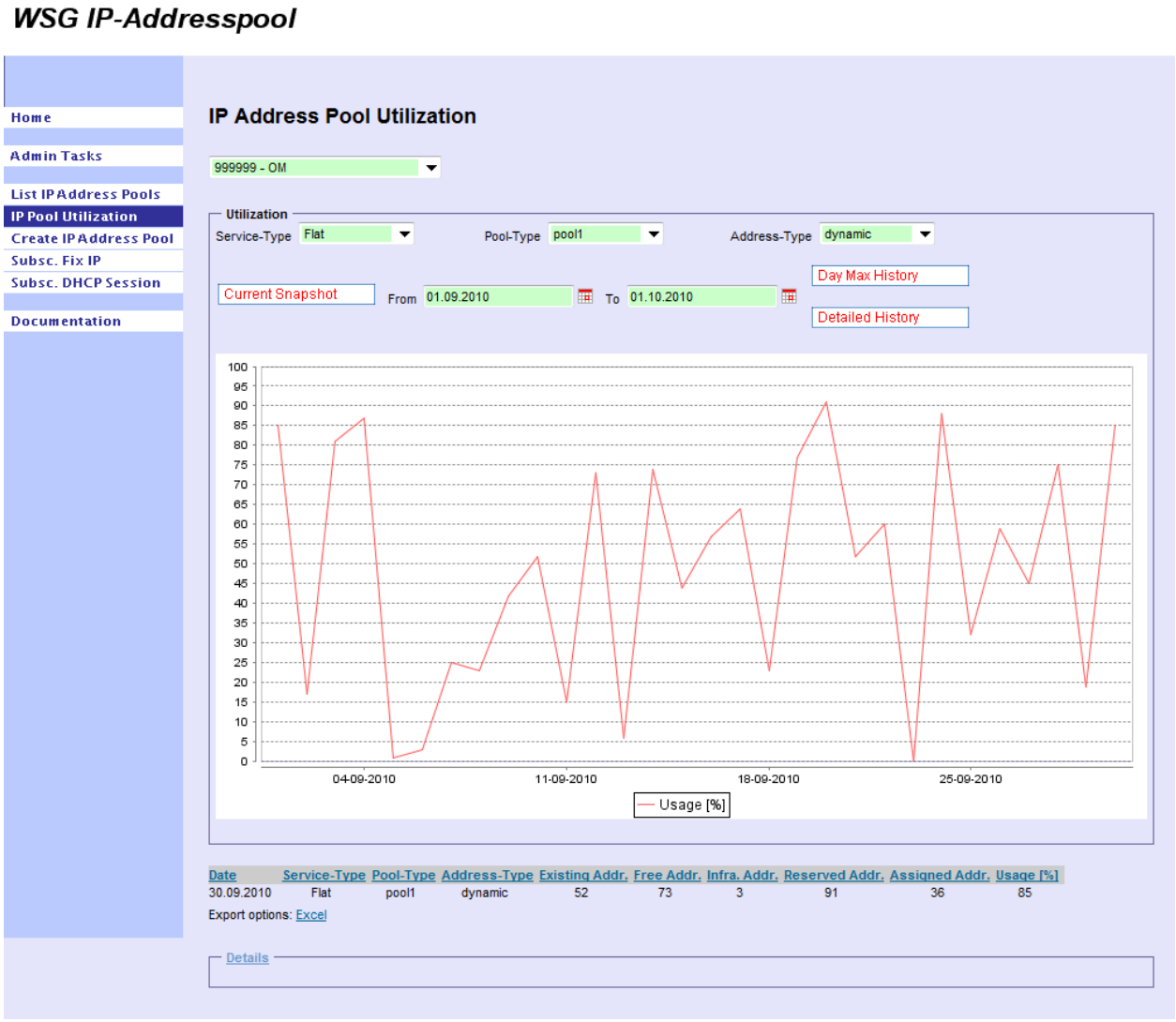
The details of a selected IP Pool are shown.



The IP Pool may be deleted by submitting 'delete'.

3.2.3 IP Pool Utilization

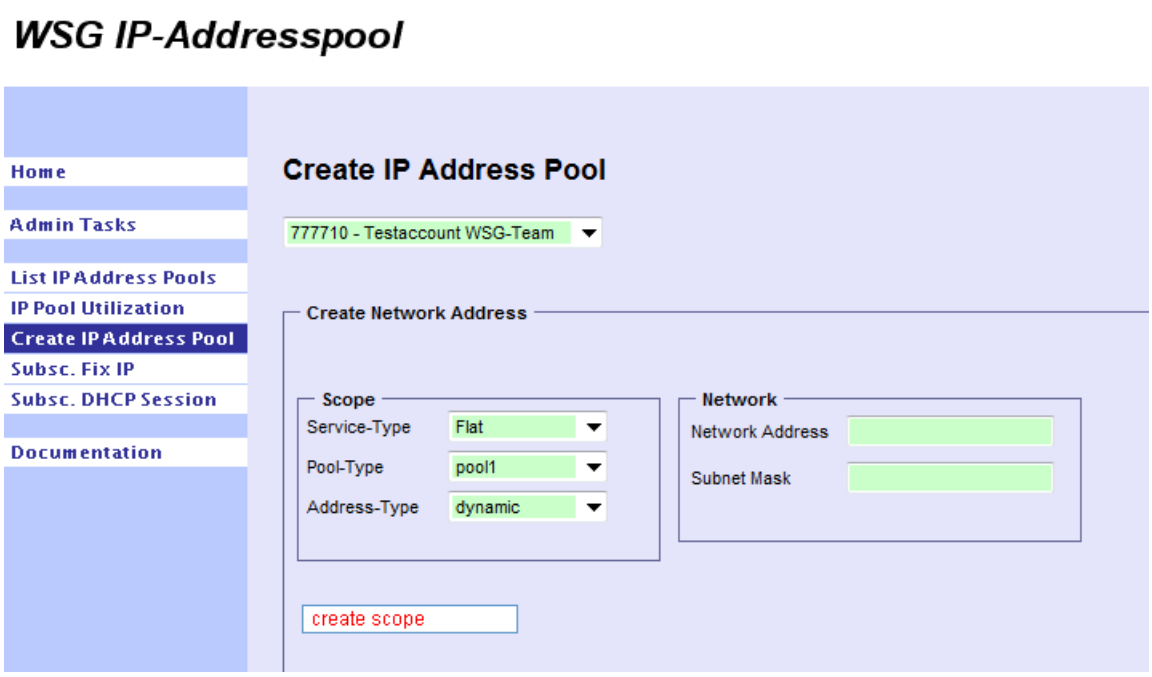
The utilization reports can be queried for selected service-type, pool-type and address-type.



- Current snapshot: returns a report with the last utilization measurement
- Day Max History: returns a report of the dayly-utilization-maximas for a given period (including chart)
- Detailed History: returns a report of all utilization measurements done in the provided period (including chart)

3.2.4 Create IP Address Pool

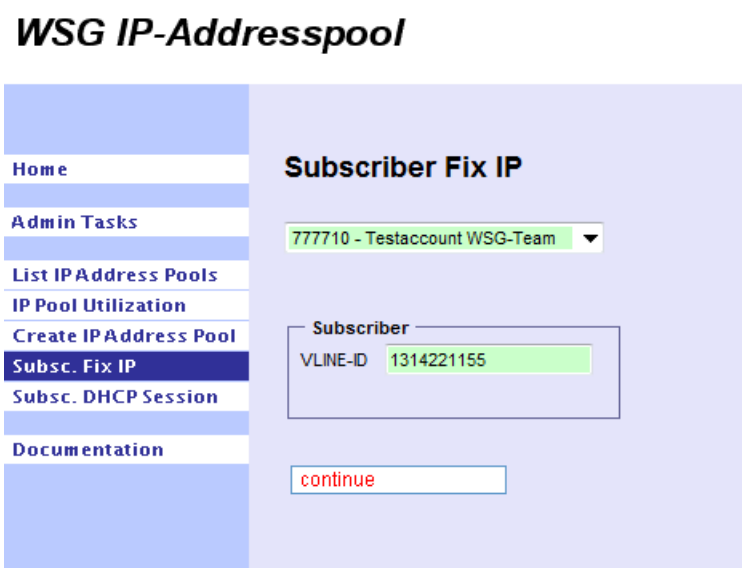
A new IP Address Pool can be created.



The following mandatory attributes must be provided:

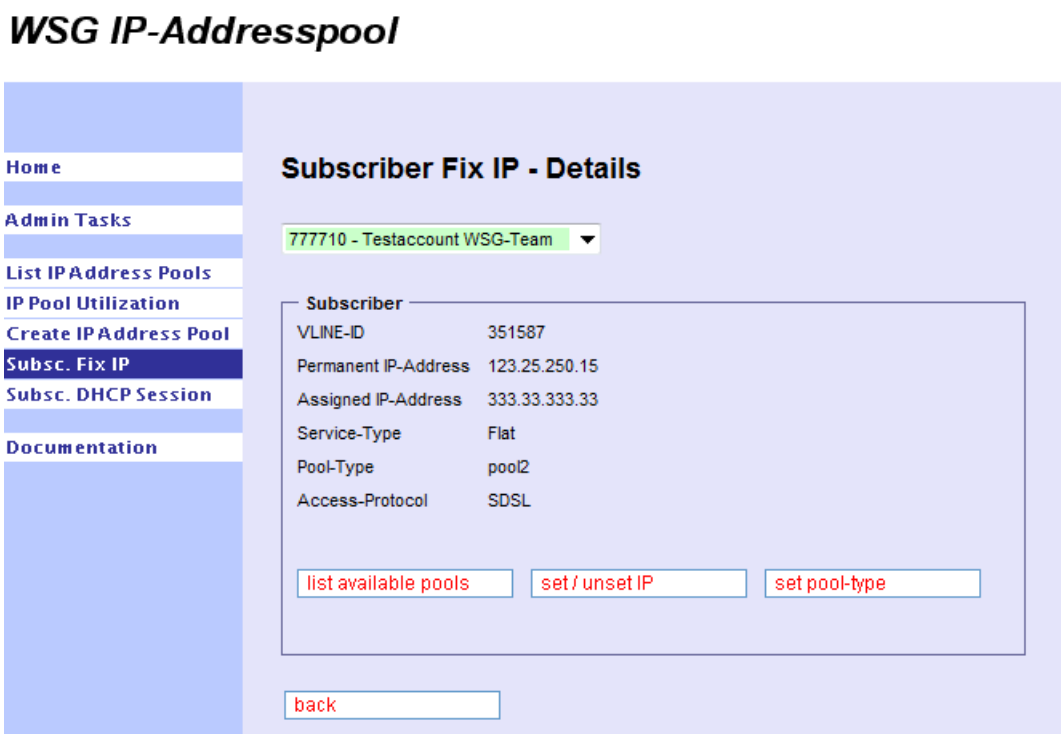
- The Service-Type and the Pool-Type
- The BRAS
- The network address
- The subnet-mask

3.2.5 Subscriber Fix IP – Select



Providing its VLINE-ID, a subscriber can be selected with 'continue', which forwards to the subscriber's details.

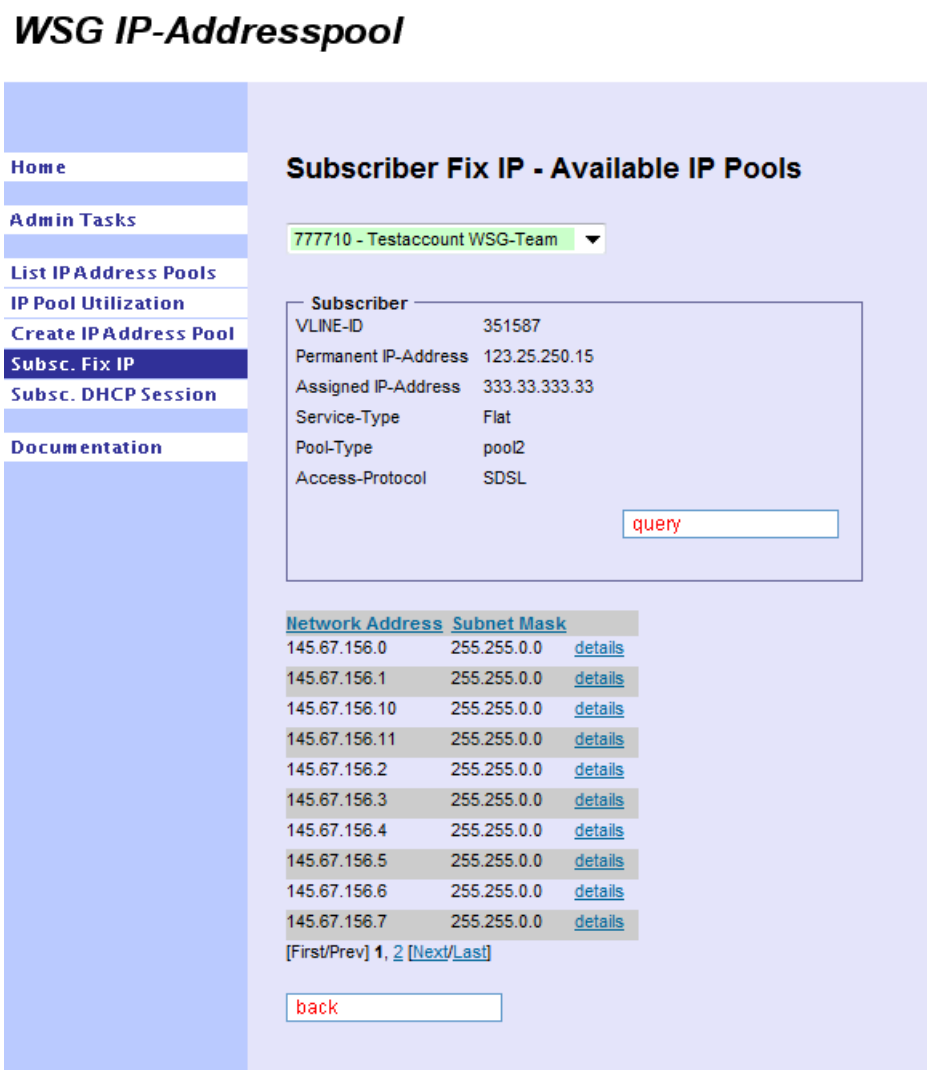
3.2.6 Subscriber Fix IP- Details



For a selected subscriber, the following operations are available:

- 'list available pools': forwards to the 'List available Pools' – page
- 'set/unset fix IP': forwards to the 'Set/unset Fix IP' – page
- 'set pool-type': forwards to the 'Set Pool-type' – page

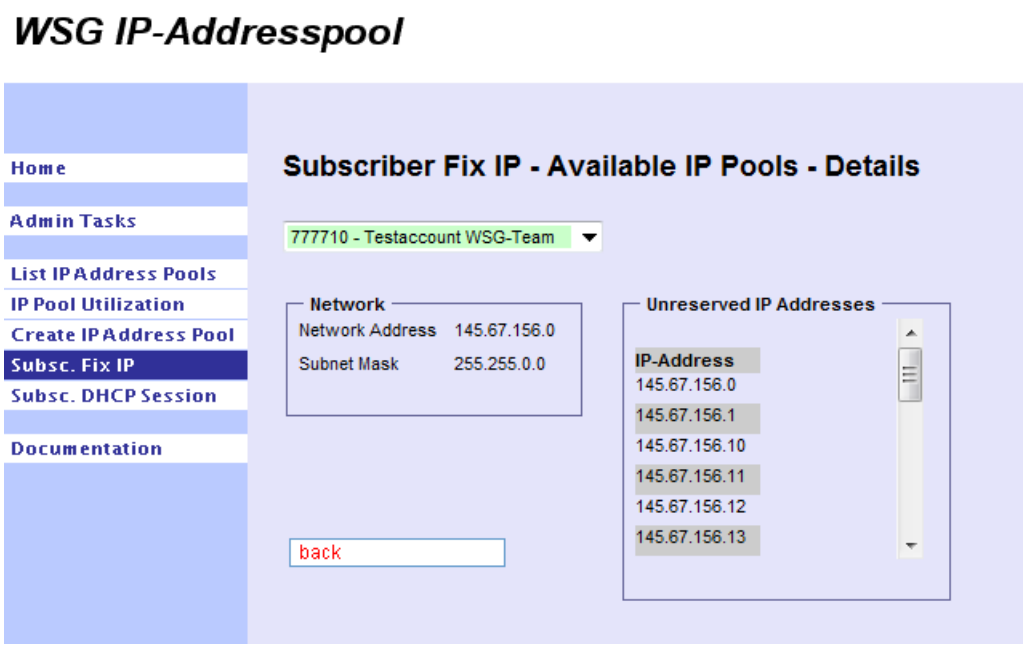
3.2.7 List available Pools



For a selected subscriber, the available IP pools for further address assignment can be queried.

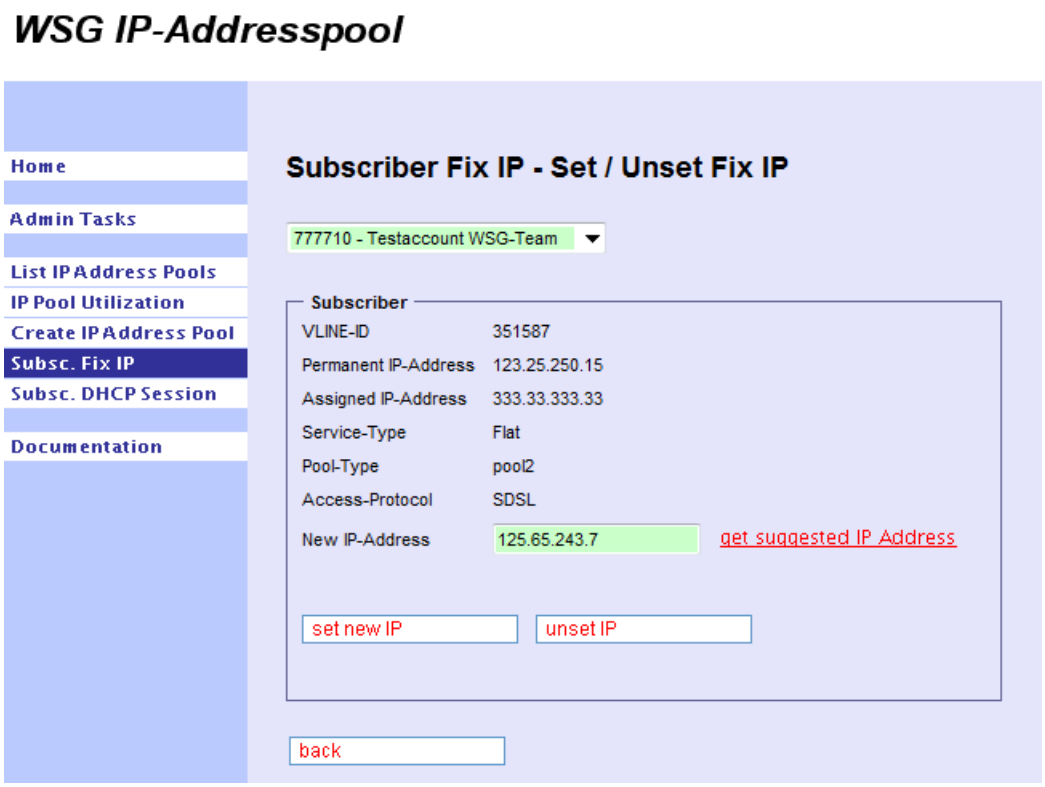
For a listed pool, the pool details page can be requested.

3.2.8 Available Pool Details



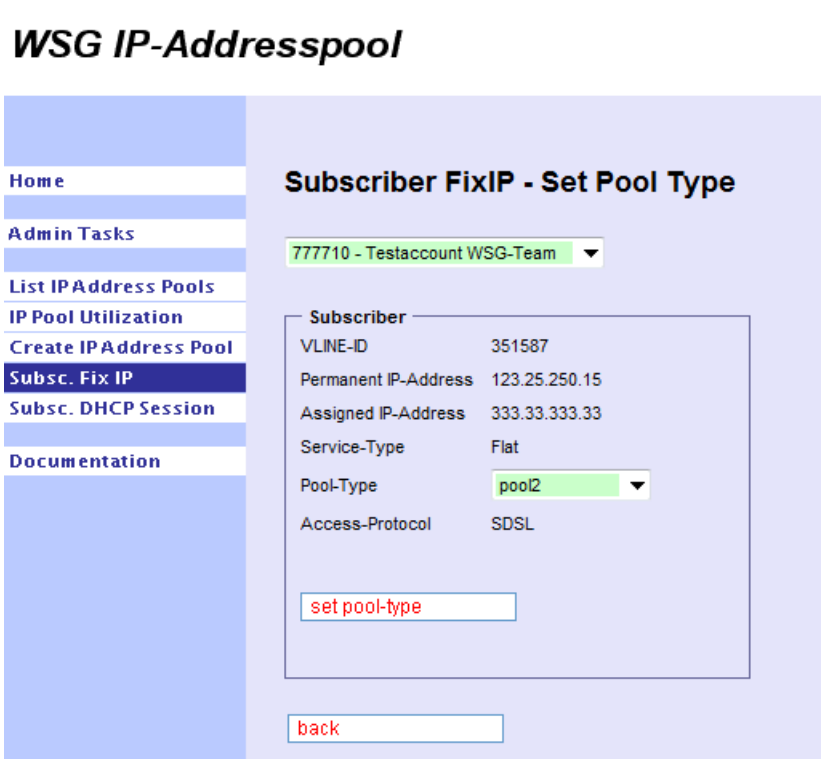
The details of the available pool are shown, especially its unreserved IP addresses.

3.2.9 Set/Unset Fix IP



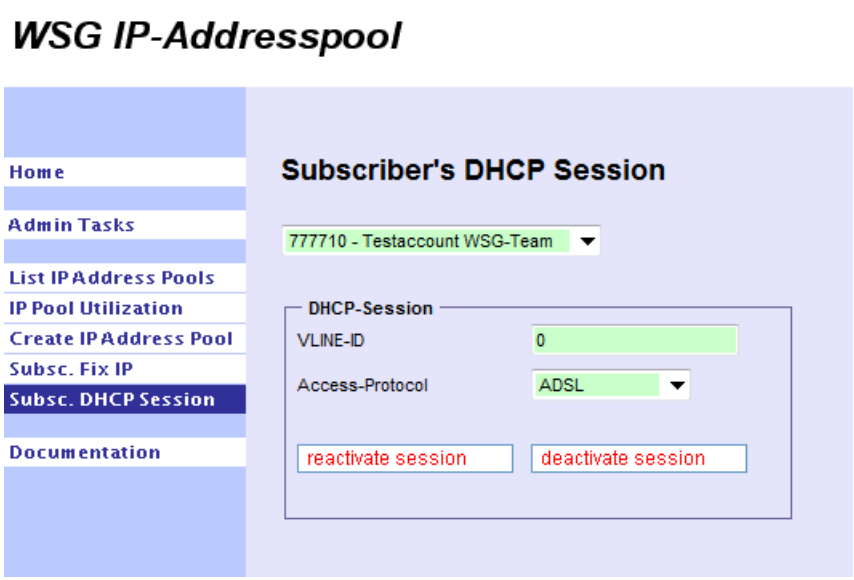
The fix IP address of a selected subscriber can be modified ('set') or removed ('unset'). Also, a suggested IP address can be requested through 'get suggested IP-address'.

3.2.10 Set Pool-Type



The pool-type of a subscriber's assigned IP-address can be modified with 'set pool-type'.

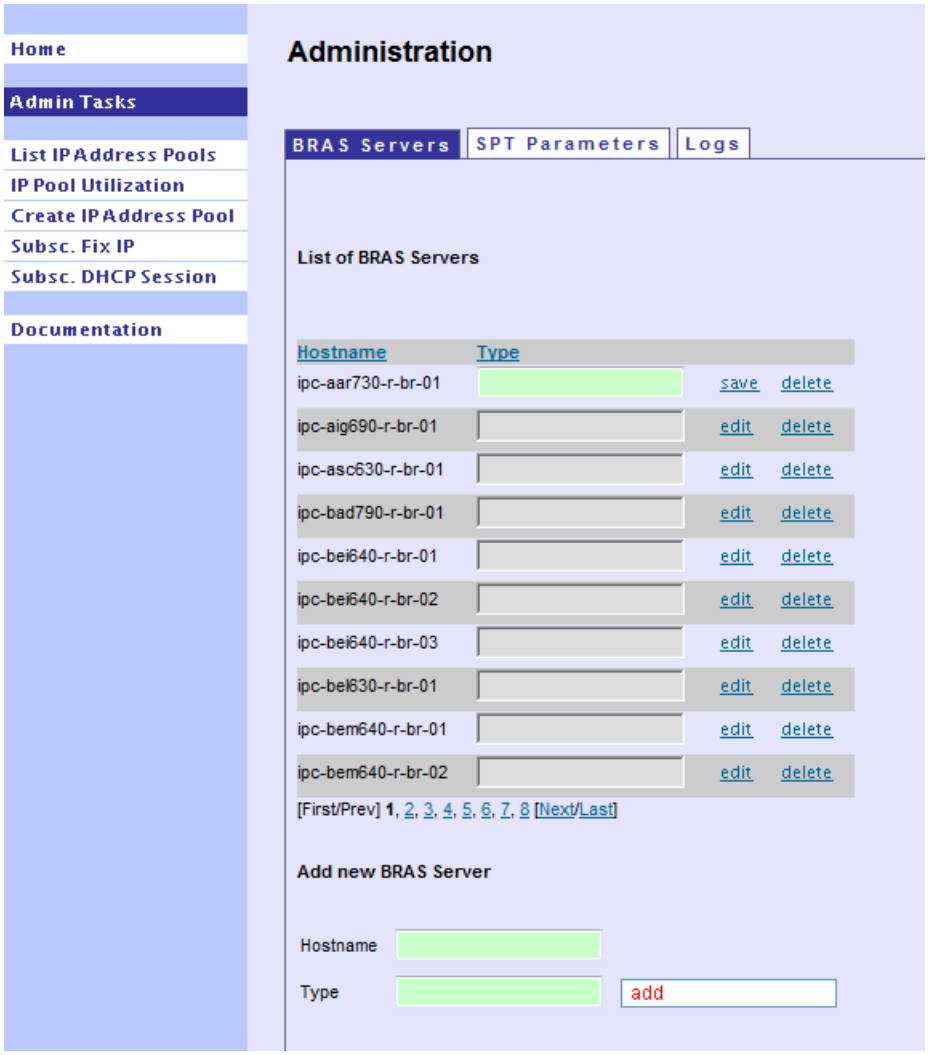
3.2.11 DHCP Session – Select



Providing its VLINE-ID and the access-protocol, the corresponding DHCP session can be either reactivated or deactivated.

3.3 Administration

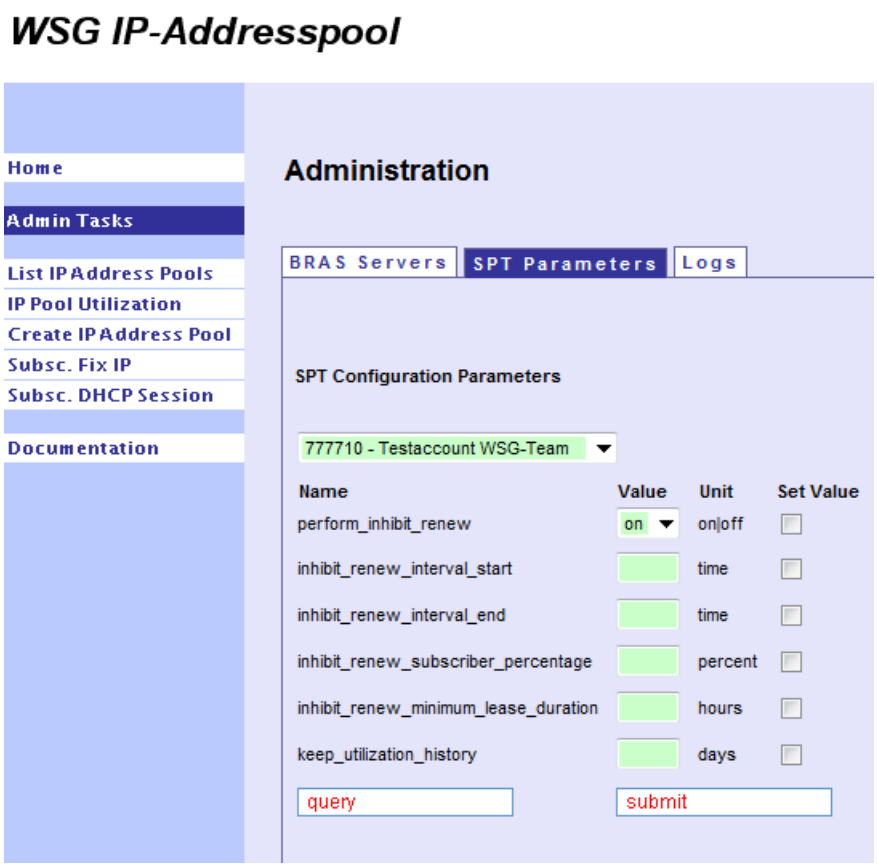
3.3.1 Manage BRAS Servers



This page provides management functionalities of the available BRAS servers:

- Create BRAS server
- Delete BRAS server
- Edit BRAS server

3.3.2 Manage SPT Parameters



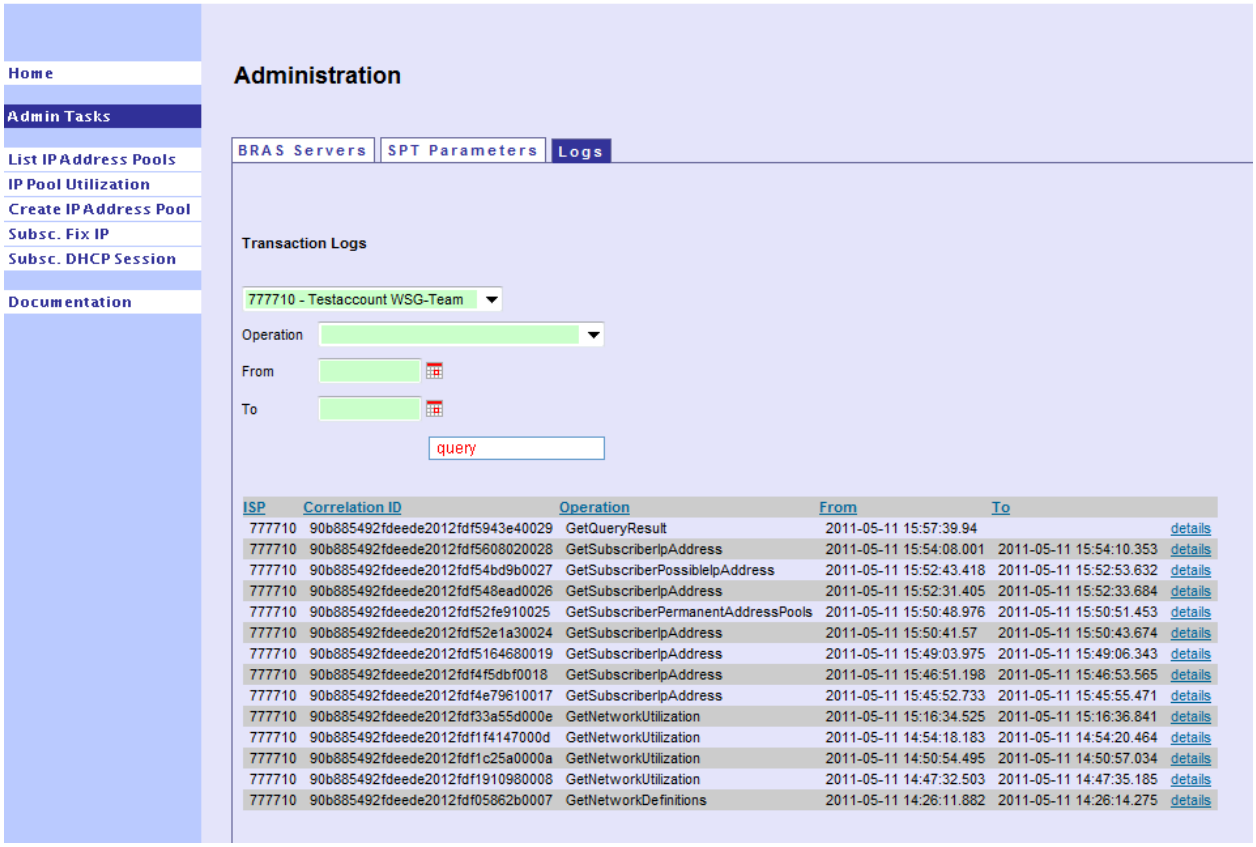
This page is accessible for Swisscom Superusers as well as for ISP-Superusers and allows to query and save ("submit") the following SPT configuration parameters:

- perform_inhibit_renew
- inhibit_renew_interval_start
- inhibit_renew_interval_end
- inhibit_renew_subscriber_percentage
- inhibit_renew_minimum_lease_duration
- keep_utilization_history

When saving, only the parameters for which the "Set Value" checkbox is checked will be saved.

3.3.3 Manage Logs

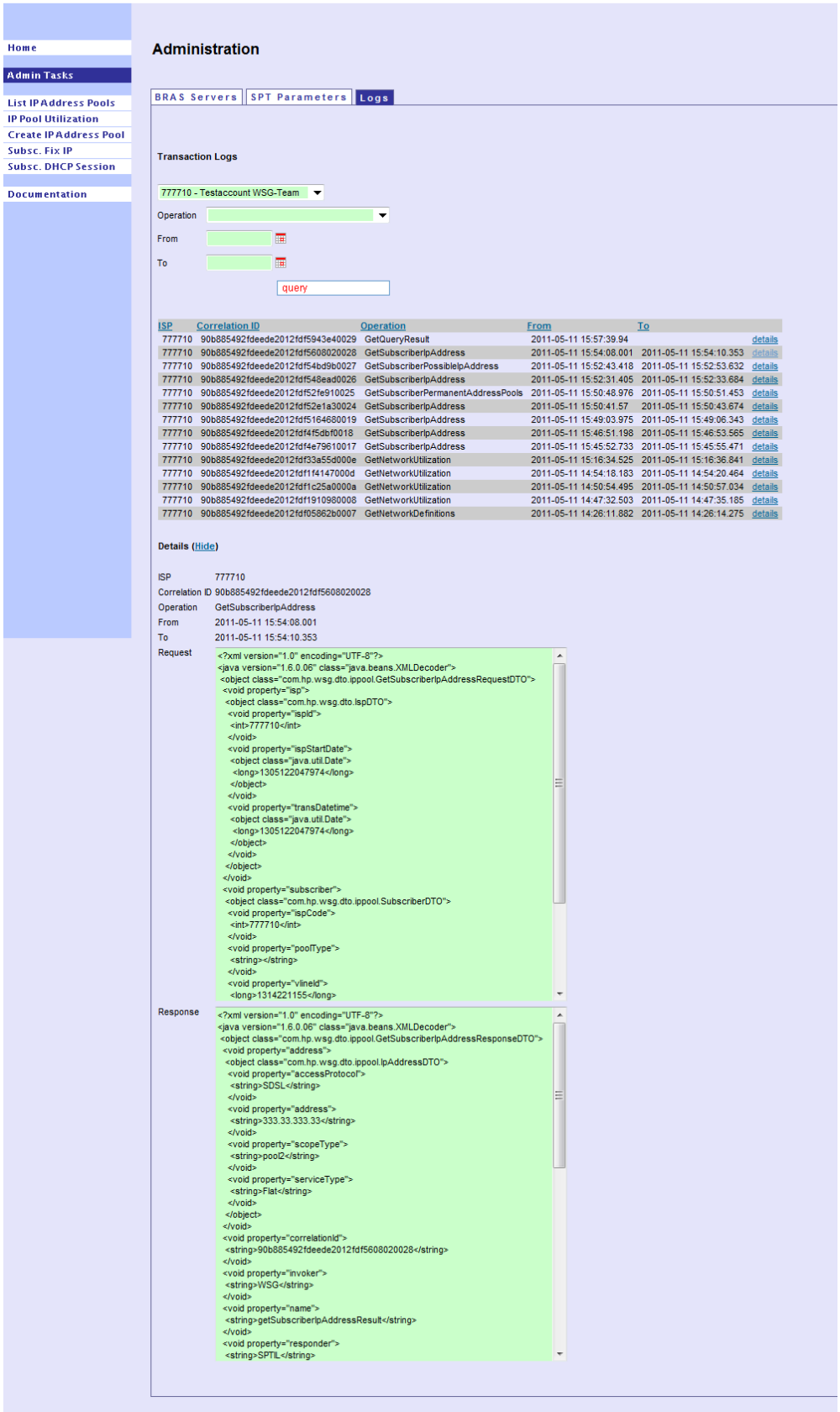
WSG IP-Addresspool



This page provides the possibility to query the IP-Pool Logs (requests and responses) with a set of filter criterias like date and service-name.

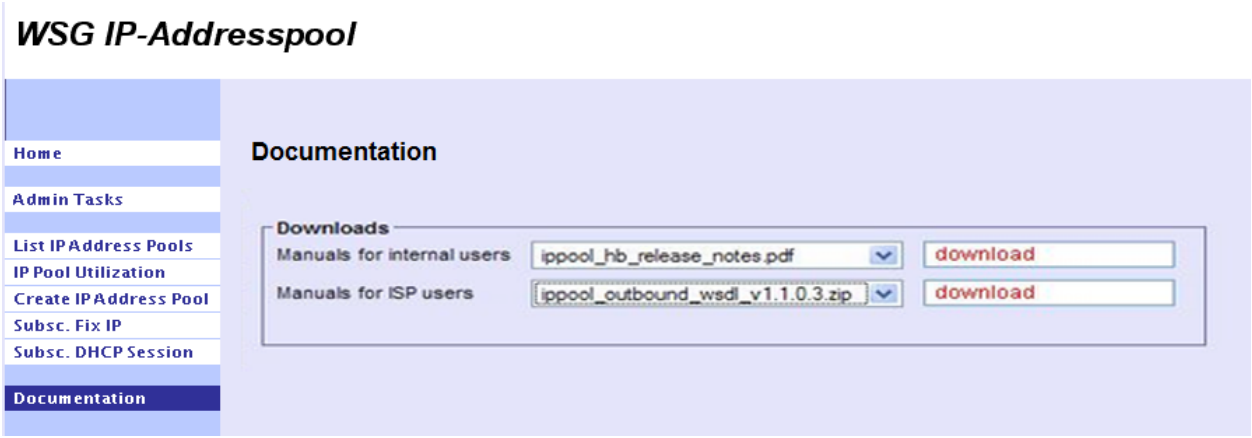
The details of a specific entry can be viewed by selecting the 'details' link.

WSG IP-Addresspool



3.3.4 Documents / Download

This page provides download-links to the following IPPOOL-documentation:

- internal (only available to Swisscom internal users):
  - operating-guide
  - server installation guide
  - release notes
  - ippool_inbound_wsdl.zip

- external (also available to ISP users):
  - "this" user-manual
  - ippool_outbound_wsdl.zip